



USING DIGITAL PHOTOGRAPHY TO CREATE AN INVENTORY OF DINOSAUR NATIONAL MONUMENT'S

PALEONTOLOGY RESEARCH LIBRARY

By Marilyn Ostergren and Ann Elder

Literature inventoried as part of this project helps support research on fossils such as this *Camarasaurus* skull (DINO 2580), which can be viewed and enjoyed by the public in the rock wall in the Quarry Visitor Center at Dinosaur National Monument. NPS, DINOSAUR NATIONAL MONUMENT

The paleontology research library at Dinosaur National Monument, Colorado, is a significant research collection that contains material dating back to the late 1800s. The research documents, primarily journal articles, are grouped by subject and author and are stored in document boxes on shelves. A relatively small number of references in this collection describe park resources and should be listed in NatureBib, the comprehensive NPS library catalog; however, the bulk of the collection is not park-specific. Most of the references at Dinosaur are relevant generally to the park's paleontological resources and are important to researchers working with the park's fossil collection. The park's goal is to improve access to the collection to better meet the needs of park staff and researchers who come to study this internationally significant fossil collection.

Inventing an alternative strategy

The first step toward this goal was bringing a team of professionals (an archivist, two curators, and a librarian) together at the park to make recommendations for this collection (in addition to other library resources, the archives, and the museum). Because this library did not have an up-to-date catalog, we could not do a standard library inventory (which is done by comparing what is in the catalog with what is on the shelves). We needed an alternative strategy to identify and document the contents of the collection for accountability and to support a later complete cataloging effort. We came up with the idea of photographing one or more pages of each document with a digital camera—an efficient way to conduct an inventory with additional value and potential (discussed under “Benefits” later in the article).

Setup for taking digital images of documents

Our tools consisted of a digital camera with a 125-image capacity, three to four sets of rechargeable batteries, a camera copy stand, a standard gray exposure card, two lamps, a laptop computer loaded with the camera software, and the numbers “2,” “3,” and “4” printed on small squares of paper reinforced with contact paper. We attached the camera to the copy stand, arranged the lamps to illuminate the platform, and placed the gray card on the surface that would be photographed (fig. 1).



Figure 1. Librarian Marilyn Ostergren sets up a digital camera in preparation for photo-inventorying the paleontology research library collection at Dinosaur National Monument. In two weeks of work, she and Ann Elder, the park's museum curator, inventoried more than 4,900 research documents in the park's library.

We photographed the documents box by box. For each document we took the following steps:

1. Set the camera exposure while focused on the gray card to give an accurate reflection of the ambient light. (Because the documents are primarily white, the camera's automatic exposure setting will underexpose the image in its effort to compensate for the intense light reflected from the white surface. The gray card corrects this). We concentrated on getting a good image of the information and were not concerned with the color cast presented by fluorescent or incandescent lighting.

2. Arranged the document. (The camera had a small LCD screen on the back that allowed us to be sure that the document was positioned correctly without having to lean over and look through the viewfinder.)
3. Took the picture (fig. 2).

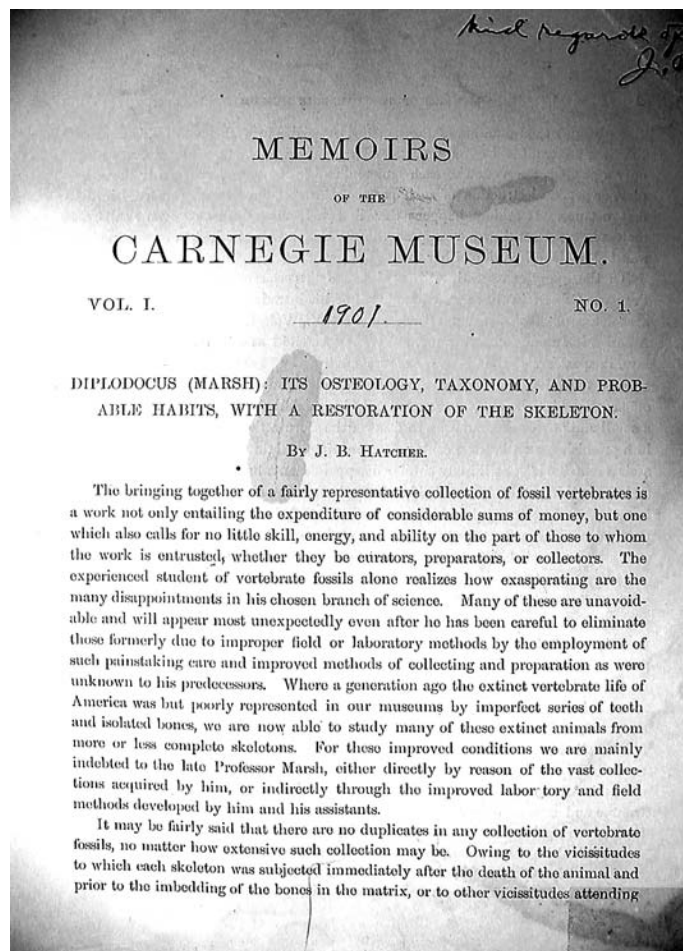


Figure 2. A sample photo from the digital paleontological research library inventory.

For cataloging purposes we wanted the images to contain citation information (title, author, date, etc.) and also wanted them to convey a sense of the document's content. To do this, we sometimes took more than one image of a single document. For example, for a book we often needed to take a photo of the title page (to record author and title information), the back of the title page (where information including the date of publication is often found), and the table of contents. In these cases, we placed numbered cards on the subsequent pages to indicate that this was the second, third, or fourth picture of the same document. We needed two pictures in about 30% of the cases, but rarely needed a third or fourth.

After completing a box of documents, we plugged the camera into the computer, downloaded the images into a

folder or directory labeled with the box name, deleted the images from the camera, and moved on to the next box. At the end of each day we backed up the images on another computer.

Our productivity level was low for the first few days as we worked out the procedure and checked our work to be sure the images were of adequate quality. By the fourth day, our routine was set. In that eight-hour day we processed 600 documents or about 100 documents per hour. This included the time spent making backups, taking breaks, and handling phone calls and other business. Altogether, in a two-week period we created an inventory of 4,902 documents in the library, detailed in 7,002 images on six CDs.

Benefits of a photo inventory

The digital photos are useful for the following purposes:

1. Browsing the collection—A user can scroll through the images to see, for example, what documents are stored in the boxes labeled “Crocodylia.”
2. Cataloging the collection—The images contain enough information for basic cataloging (e.g., author, title, date, subjects). This could be done at the park, or the CDs could be sent to a cataloger elsewhere. Eventually the documents will be alphabetized by the last name of the first author, but for now they remain grouped by subject and author.
3. Enhancing the catalog—When a catalog is created, the images can be included in the catalog record, allowing the searcher to view pages from any document that is retrieved by a search.

We welcome inquiries about the project.

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